



India Wilds®

Newsletter

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Inside this issue:

Ice on Fire	2
Peace Lily Or SPATHIPHYL-LUM	6
Conservation News	9
Equipment Discussions	15
Natural History	25
Wildlife Photography	27

Cover Page Photograph:

Waterfall
by Sabyasachi Patra

Ice on Fire :

We the human beings are just one species among numerous other species in the Planet Earth. However, our unrestrained population increase and disproportionate use of the natural resources is posing a grave threat to nature and hence on our own existence.

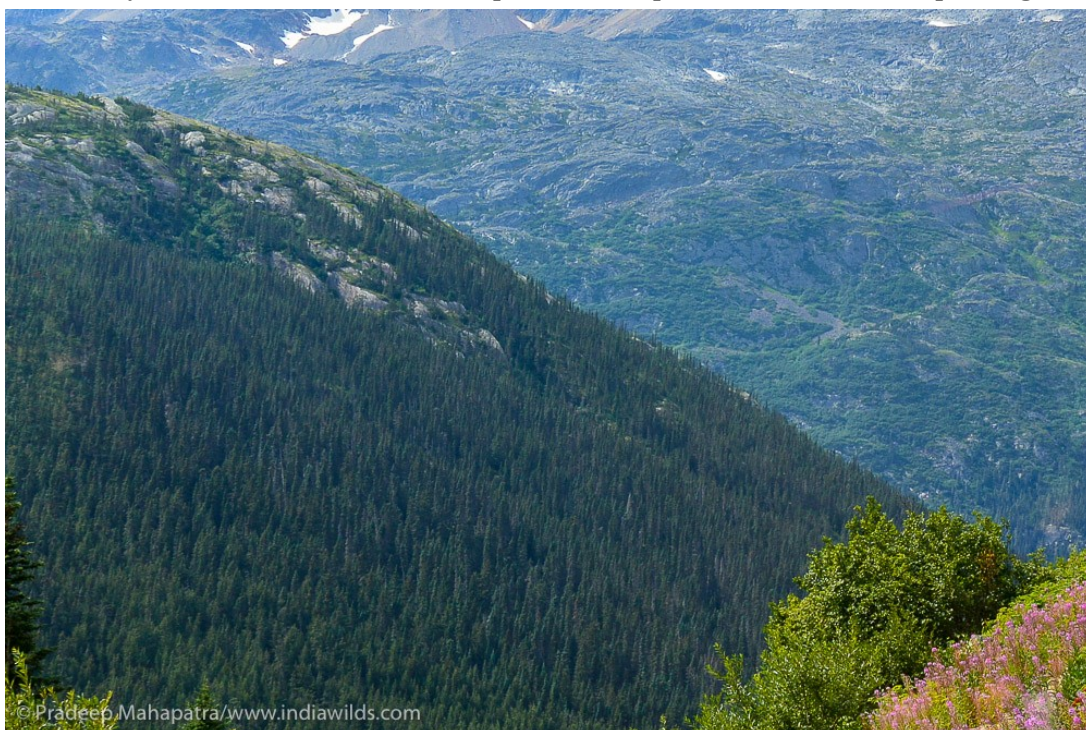
Since the advent of industrial revolution, our consumption of fossil fuels has increased and along with our new high-carbon lifestyle, the global ambient temperatures have been continuously on the rise. This is causing massive changes to Earth's climate. As a result even the forces of nature have changed their rules. They are no longer predictable.

Record Heat in Siberia:

The Siberian tundra, which holds the world record for low temperatures, is now facing extreme high temperatures. Verkhoyansk, a town in Sakha republic and located above the Arctic Circle has a lowest temperature record of -68 °C. Verkhoyansk is now facing a heat wave which is giving rise to forest fires and has recorded 38 degrees centigrade (100. 4°F) on 20th June, 2020. This is the maximum temperature ever recorded in the Arctic. In the Sakha Republic, more than 275,000 hectares of forests are burning.

Forest Fires:

These forest fires are very alarming from a Climate Change perspective as these forests and shrub ecosystems are either located above peat or above permafrost. World over, peat bogs



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Coniferous Trees

Photo Courtesy : Pradeep Mahapatra



hold lot of carbon. So when there is forest fire, lot of carbon is released into the atmosphere. Similarly forest fires also release carbon stored in the permafrost.

The arctic forests have predominantly coniferous trees. The cone like needles of these trees drop in the winter. However, due to very low temperatures the cone needles don't decompose and remain buried in the permafrost. The cone needles contain monoterpenes, diterpenes and a host of essential oils. People in many parts of the world, including people in India, use the cone needles of coniferous trees to light a fire. During wildfires these cones needles, which had remained undecomposed in the soil, burn vigorously. Coupled with the strong arctic winds, the forest fires increase in intensity and spread fast. These massive forest fires act as a feedback in further increasing the temperature to melt the permafrost and release more carbon into the atmosphere.

These kinds of massive high temperatures are going to melt a lot of permafrost in the Siberian tundra. Recently researchers have suggested that the Carbon released through boreal fires could considerably accelerate Arctic warming. Earlier this boreal fire occurrence mechanisms and dynamics was largely unknown. In a paper titled "Extensive fires in southeastern Siberian permafrost linked to preceding Arctic Oscillation" (Jin-Soo Kim et. al.; Science Advances, Jan 2020, DOI: 10.1126/sciadv.aax3308) researchers have said "It is found that the annual burned area increased when a positive Arctic Oscillation (AO) takes place in early months of the year, despite peak fire season occurring 1 to 2 months later. A local high-pressure system linked to the AO drives a high-temperature anomaly in late winter, causing premature snowmelt. This causes earlier ground surface exposure and drier ground in spring due to enhanced evaporation, promoting fire spreading. Recently, southeastern Siberia has experienced warming and snow retreat; therefore, southeastern Siberia requires appropriate fire management strategies to prevent massive carbon release and accelerated global warming".

Climate Change knows no Borders:

These massive forest fires give rise to heavy smoke layer in the sky and the air quality in different countries, thousands of kilometres away from the arctic region, is impacted. These smoke layers contain many thousands of tiny particles, which cause massive respiratory problems to people. The emissions from automobiles and industries in the cities are already causing air pollution in many large cities. As a result people are facing health issues. As study in USA had found that kids and teenagers exposed to air pollution have damaged DNA in form of short telomere. (<https://www.indiawilds.com/diary/indiawilds-newsletter-vol-9-issue-viii/>)

The length of telomere shortening was directly proportional to intensity of vehicle exhaust. The smoke layer due to the forest fires will exacerbate respiratory health problems as well as maim our kids forever by changing their DNA. So the world has to wake up to the reality that

even if you are far away from arctic, you can't escape as climate change knows no borders.

In August 2019, an estimated 7 million acres were on fire in Siberia and Russia had to send military transport aircraft and helicopters to fight the fire. Nevertheless, due to low human populations, the wildfires in arctic is still seen as happening in a far distant place. However, the heat waves are also resulting in forest fires in other places. Recently Australia faced massive forest fires. In 2019, Alaska had massive forest fires and had to spend more than \$150 million dollars to contain the forest fires from reaching human settlements.

Permafrost melting:

The high ambient temperatures and melting of the permafrost is not just limited to Siberian tundra. When a soil and rock remains at or below 0 degree centigrade for at least two years, it is classified as permafrost. About 25% of the northern hemisphere is covered by permafrost. So permafrost occurs in roughly about 23 million square kilometres of area in the northern hemisphere. This permafrost layer used to reflect back the sunrays. Melting of the permafrost reduces the area which can reflect back the sunrays. The places which used to reflect sunlight now start absorbing most of it. As a result the temperature keeps on increasing which gives rise to even more melting of permafrost.

Polar bears on Peril:

The climate change related melting of sea ice is causing massive problems for an iconic species – the polar bears. Without



Polar Bear

Picture- Zapolyarnaya Pravda

seaice polarbears can't hunt their favourite food – the seals. So they have to swim far more distances in search of food and in the process spend more energy. In June 2019, a polar bear walked 1500 km south and away from the arctic in search of food. This polar bear was found in an emaciated condition in the industrial city of Norilsk and didn't react to people moving close to it.

<https://siberiantimes.com/ecology/casestudy/news/starving->

[polar-bear-can-hardly-move-say-residents-of-norilsk/](#))

If the Siberian permafrost heats up then polar bears will not be able hunt. Their body insulation is not designed to bear the heat. So this iconic species is likely to soon get extinct, perhaps in our lifetimes.

Sea level rise & Flooding:

The melting of the permafrost and polar ice caps will also result in huge amounts of water in the sea. The increase in sealevel will flood many cities. The USA federal Government now wants to build a wall to protect coastal Miami-Dade from hurricanes and flooding which are going to be stronger due to climate change. This plan will cost a massive \$4.6 billion dollars.

(<https://www.miamiherald.com/news/local/environment/article243276326.html>

) This plan has been drafted by the Army Corps of Engineers. In 2019, Venice was flooded. Many ancient structures and museums were flooded and artwork and artifacts damaged. (<https://www.indiawilds.com/diary/indiawilds-newsletter-vol-11-issue-xi/>) In near future many countries will be forced to wake up to the issue of flooding caused by Climate Change and its massive economic impact.

Melting Glaciers:

The melting of the permafrost will also impact another area – tourism. Glaciers are melting and receding. So tourist infrastructure in some places becomes redundant. In Iceland the Government had built visitor centre few hundred meters from the the Vatnajökull glacier tongue. Now the glacier has receded around 1.5 kms. In Norway, in 2019 visitors were astonished to find that ice has vanished in many landscapes leaving them disappointed. In India, in ladakh local communities depend on the ice melt from the glaciers for their water needs as well as crops. However, the receding glaciers is massively impacting their life and lifestyle.

Our Planet Earth has been gripped by a full blown Climate Crisis. It is time we realise that Climate Change is hitting our



lives in myriad ways. The intricate linkage between melting of polar ice caps, permafrost, sea level rise, forest fires, heat waves, increased cyclones and landslides and pandemics have to be explained to the people at large. Only then Climate Crisis can become a national agenda. Else, Government will continue in its short-sighted approach and keep on sacrificing our forests which will further fuel climate change.

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Vatnajökull glacier

Picture– Ranbir Mahapatra

Know Your Plants -

PEACE LILY OR SPATHIPHYLLUM

By Dr.Rashmi Rekha Patra

Peace Lily, also known as White Sail Plant or Spathiphyllum, does not belong to Lily family (Liliaceae) but is a member of Arum family (Araceae). This plant has a quiet elegance due to its shiny, creamy, white flowers that are held high on stiff stems contrasting well with the dark green foliage. However, what most people thought of as flower is actually a specialized leaf bract (spathe) that grows hooded over the flowers. The spathes resemble the white flag of peace and surrender and in the olden days gave an impression of the sails of a ship. *Spathiphyllum wallisii*, in addition to its indoor use is also suitable for landscaping in warm climate regions. Let us discuss this plant in detail.

FACT FILE

Kingdom: Plantae

Order: Alismatales



Peace Lily

Plant family: Araceae

Sub-family: Monsteroideae

Botanical / Scientific Name: *Spathiphyllum wallisii*.

Tribe: Spathiphyllae

Genus: *Spathiphyllum*. The name is derived from Greek, ‘spathe’ means a spoon and ‘phyllus’ means leaf, a reference to a spoon-shaped leaf.

Species Name: *wallisii*.

The species name *wallisii* was given in honour of the German plant collector Gustav Wallisii (1830- 1878) who has introduced more than 1000 plant species in Europe, including various orchids.

Common Names: *Spathiphyllum* is commonly known as Spath, White

flag, and White sail plant.

Origin: It grows in tropical rainforests of America, Colombia, Venezuela and Southeastern Asia.

Plant Type: It is a monocotyledonous, evergreen, herbaceous, perennial rhizomous, flowering plant of spherical in shape and upright in form.

Know Your Plants -

Types of Peace Lily: There are over 40 varieties but most popular varieties are of hybrid origin. 'Mouna Loa,' a vigorous cultivar with long leaves and large flowers, is perhaps the best known, but 'Cupido,' 'Illusion,' 'Petite,' and 'Sensation' are also grown.

Height: 20-60 cm.

Flower Inflorescence: Spadix.

Flower Description: Arum like flowers, which are produced during spring and early summer and sometimes into early fall, rise above the foliage on stiff stems. They are hermaphrodite that grow in spadix inflorescence. The white, sail like spathe surrounds the central spadix which is a spike of creamy yellow, white or greenish white coloured small flowers. The fleshy spike develops male flowers above and female flowers below. Peduncle is exceeding the foliage. The spathe becomes green as flowers mature.

Foliage: Peace lilies produce tufts of foliage from a small underground stem (rhizome). Leaves are erect, oblong –lanceolate to elliptic - oblong, about 4 to 25 inches long and 1 to 10 inches wide. They are dark green, glossy, lanceshaped and deeply veined.

Fruit: Berries.

PLANT CARE

Potting Mix: Well drained, peat-moss-based rich, loose potting soil containing plenty of organic materials is best suited for Peace lilies.

Soil pH: 5.8 to 7

Repotting: Re-pot every 12 to 18 months if required, otherwise simply replace and replenish some of the potting mix as needed. Move into a bigger pot in spring.

Propagation: When repotting the mother plant can be divided carefully and each part with roots can be grown in separate pots.

Light: These plants grow better in partial shade. Direct sunlight cause browning of leaves whereas yellow coloured leaves indicate the light to be too strong. If you want to keep indoor than place it near window to get some indirect sunlight.

In my case when I transferred the peace lilies from rooftop to balcony they started blooming. Then I placed them near my windows and the white blooms magnified the interior decor.

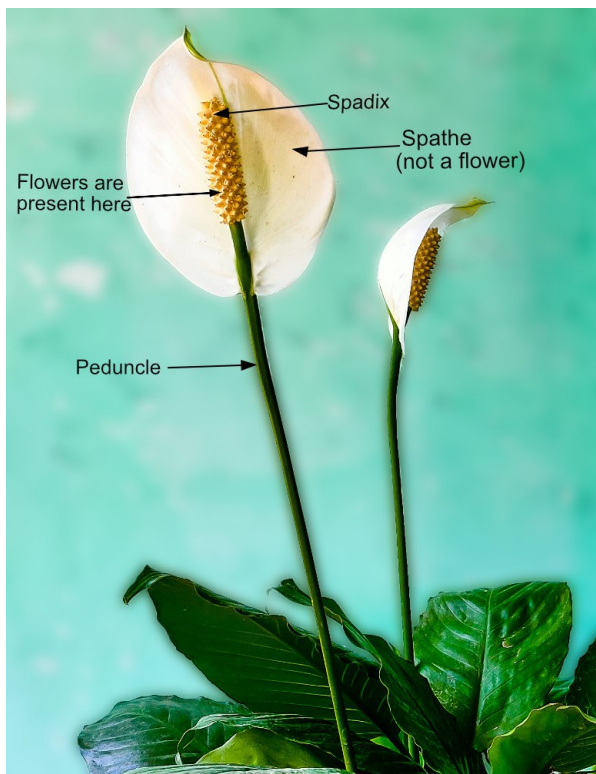
Temp: Normal room temperature is suitable, with a minimum of 13-16 degrees C (55- 60 degrees F). Avoid positioning in or near the direct air stream of heaters or air conditioners.

Water: Keep the soil moist but do not over water during the growing season. Allow the surface to dry out before rewatering. Reduce the amount of water in cool conditions. Set the pot on a dish of moist gravel and mist the foliage frequently. Peace lilies are adverse to chlorinated tap water so in that case keep the water to sit in a bucket for some time then chlorine will evaporate.

Know Your Plants -

Feeding: Peace lily is not a heavy feeder so feed occasionally with a balanced liquid fertilizer every two weeks in spring and summer. Tip of the leaves and bloom will turn brown due to excess fertilizer.

Pruning: These plants do not need pruning to restrict their size. Dying leaves and flowers can be cut away to beautify the plant.



Pests: Basically three types of pests infect this plant like aphids, mealy bugs and scales. A vigorous shower followed by a dose of insecticidal soap or neem spray will wipe them out. Regular washing or wiping out of dust from the leaves with a clean cloth can keep the plant healthy and beautiful.

Toxicity: Peace lily contains calcium oxalate in its tissues. So it is mildly toxic to humans and animals when ingested. It can cause significant irritation in mouth, tongue and lips. Serious stomach upset can occur if swallowed. This plant also produces some pollen and floral scent so people allergic to these should not keep them in their house.

Benefits of Peace Lily

The Peace lily is a beautiful plant that can improve the indoor air quality

Peace Lily description

upto as much as 60 per cent. This was proved through a study by NASA in association with the Associated Landscape Contractors of America (ALCA) in 1989 to research ways to clean the air in space stations. Its results suggested that, in addition to absorbing carbon dioxide and releasing oxygen to the atmosphere through photosynthesis, Peace lilies along with few other volatile organic pollutants such as benzene, formaldehyde, trichloroethylene xylene and ammonia. It helps to reduce the levels of mold spores that grow in the room by absorbing those spores through its leaves and circulating them to plant's roots to be used as food. Keeping Peace lilies in bathrooms helps to reduce moisture in the air as the plant will absorb it. Thus the dampness, required for molds and mildew to grow on curtains and tiles of the bathroom is reduced minimizing their growth. Peace lily can also absorb harmful vapors from acetone and alcohol and controls their presence in the indoor atmosphere. It eliminates harmful radiations from the TV and computers. The bright foliage and the beautiful flowers of Peace lily promotes sound sleep and relaxation of mind and body.

It is also considered to bring peace and good fortune to its owner. Hence Peace lily or Spathiphyllum plant can be best considered as a prized possession for every passionate plant lovers.

Source: Wikipedia, NASA-Report-89.pdf, Gardening knowhow.

Conservation News -

750 Tigers died in India in last 8 years

The year 2020 is supposed to be the “SUPER YEAR FOR BIODIVERSITY”, as the Strategic Plan for Biodiversity with 20 global Aichi targets adopted in 2010 ends in 2020. All the countries together are supposed to be in the process of preparation of Post-2020 Global Biodiversity Framework.



According to official data obtained over RTI by news agency PTI, 750 tigers have died in India in the last 8 years due to poaching and other causes. Madhya Pradesh topped the list with 173 deaths.

According to NTCA (National Tiger Conservation Authority) released data from the beginning of the year 2012 to 2019, a massive 750 number of tigers have died in India out of which 369 tiger deaths were attributed to natural causes. However, 168 deaths were confirmed cases of poaching. 70 deaths are under scrutiny to find out the reason for death. 42 tiger deaths were due to unnatural reasons, including accident or conflicts events.

There was also seizure of body parts which were estimated to have come from 101 tigers during the eight year period between 2012 and 2019 by different authorities across the country.

Madhya Pradesh which is estimated to have 526 tigers according to the latest tiger census, reported 173 tiger deaths during 2012 to 2019. 38 were due to poaching, 94 natural deaths, 19 under scrutiny, six due to the unnatural causes and 16 seizures, the data said.

Earlier in December 2019, in a reply to a Rajya sabha question the Environment, Forest and Climate Change Minister Pra-

Conservation News -

kash Javadekar had said that *“We must be proud of our whole ecological system. Tigers have increased by 750 in last four years,”* Mr. Javadekar had said in Rajya Sabha in reply to a supplementary question.

Maharashtra has followed Madhya Pradesh as the state with second highest tiger deaths. Maharashtra has lost 125 tiger during this period. Karnataka closely follows with 111 tiger deaths. Next in line is Uttarakhand with 88 tiger deaths, Assam and Tamil Nadu with 54 each, Uttar Pradesh and Kerala with 35 each, 17 in Rajasthan, 11 tiger deaths in Bihar and Bengal and 10 in Chhattishgarh. Odisha and AP had 7 deaths each, Telengana had 5 tiger deaths, two each in Delhi and Nagaland, and one each in Andhra Pradesh, Haryana and Gujarat, the NTCA said.

As far as tiger deaths due to poaching are concerned, NTCA says Maharashtra and Karnataka lost 28 tigers each due to poaching, 17 in Assam, 14 in Uttarakhand, 12 in Uttar Pradesh, 11 in Tamil Nadu, six in Kerala and three in Rajasthan.

Unfortunately, NTCA did not provide any details on the action taken in these tiger deaths. Given the huge number of deaths and the slow pace of prosecution and the major focus of forest department on tourism and not on conservation, it is not surprising that NTCA didn't give any details of action taken. The fact that NTCA asks the RTI applicant to contact individual chief wildlife wardens of all states to get details of missing tigers speaks volumes about the lack of focus on tiger conservation in this country.

The NTCA did not provide the details of action taken in these tiger death cases in response to the RTI application.

The present Government wants to tomtom the increase in tiger numbers in the country to project an image that all is well with India's wilderness and wildlife. This makes it easier for the Government to divert forest lands for industries, dams, mines etc as people are made to believe that we have surplus tigers and forests and hence some forests can be sacrificed for “development”. However, it is to be noted that the methodology followed by Wildlife Institute of India is not peer reviewed. Researchers have poked huge holes in the way tiger census is being conducted. If everything were overboard, then the Government would have made the tiger census methodology and data transparent.

So no wonder, following the publication of the news of 750 tiger deaths in last 8 years, the Government has issued a clarification press release casting aspersions on media that they want to malign the efforts of Government. The following is the press release issued by the Government through PIB within quotes.

“Clarification over Tiger Deaths in the Country during last 8 years

PIB 7th June

It has come to light that some section of media has presented the figure of tiger deaths in the country, in a manner which is a lopsided view of tiger conservation in the country and has apparently attempted to malign efforts of the Government of India in this regard and sensationalize the issue.

The National Tiger Conservation Authority (NTCA), a statutory body of the Ministry of Environment, Forest and Climate

Conservation News -

Change would like to put across the following :

Due to efforts of the Government of India thorough the National Tiger Conservation Authority, the tiger has been taken from the brink to an assured path of recovery, which is evident in findings of the quadrennial All India Tiger Estimation conducted in 2006, 2010, 2014 and 2018. These results have shown a healthy annual growth rate of tigers at 6%, which offsets natural losses and keeps tigers at the habitats carrying capacity level, in the Indian context. For the period 2012 to 2019, one can observe that the average tiger deaths per year in the country hover around 94, which is balanced by the annual recruitment as highlighted by this robust growth rate. In addition, the National Tiger Conservation Authority has taken several steps under the ongoing Centrally Sponsored Scheme of Project Tiger to address poaching, which too, is significantly controlled as seen in the confirmed poaching and seizure cases.

The National Tiger Conservation Authority maintains the highest standards of transparency in so far as making tiger death statistics available to the citizen through its website as well as dedicated portal - www.tigernet.nic.in, so that people can make a logical assessment, if they desire. The presentation of data over a long time frame spread across 8 years indicates an intent to imprint the gullible reader with large numbers which may cause undue alarm. Also, not adequately covered is the fact that 60 percent of tiger deaths in India are not attributable to poaching.

It is also pertinent to mention that the NTCA, through a dedicated Standard Operating Procedure, has a stringent protocol to ascribe cause to a tiger death, which is treated as unnatural, unless otherwise proved by the State concerned through submission of necropsy reports, histopathological and forensic assessments besides photographs and circumstantial evidences. It is only after a detailed analysis of these documents that cause is ascribed to a tiger death.

While it is appreciated that figures as available on the NTCA's website and as provided in the RTI reply have been used in these reports, the manner in which it has been presented causes alarm and does not take into account the gamut of processes that go into dealing with tiger death in the country and the natural gains that have been made in tiger conservation, as a result of sustained technical and financial interventions by the Government of India under its Centrally Sponsored Scheme of Project Tiger being steered by the NTCA."

Cabinet approves MoU between India and Bhutan on Cooperation in the areas of Environment

The Union Cabinet chaired by the Prime Minister, Shri Narendra Modi has given its approval for signing the Memorandum of Understanding between the Government of the Republic of India and the Royal Government of Bhutan on Cooperation in the areas of Environment on 3rd June.

Details:

The Memorandum of Understanding will enable establishment and promotion of closer and long-term cooperation be-

Conservation News -

tween the two countries in the field of environment protection and management of natural resources on the basis of equity, reciprocity and mutual benefits, taking into account the applicable laws and legal provisions in each country.

Keeping in view the bilateral interest of both sides and mutually agreed priorities, a Memorandum of Understanding covering the following areas of environment has been considered:

- Air;
- Waste;
- Chemical Management;
- Climate Change;
- Any other areas jointly decided upon.

This Memorandum of Understanding shall enter into force on the date of signature and shall continue to remain in force for a period of ten years. The Participants intend to encourage organizations, private companies, government institutions at all levels and research institutions on both sides to establish cooperation activities aimed at fulfilling the objectives of the Memorandum of Understanding. The Participants also intend to hold Joint Working Group / bilateral meetings to review and analyze the progress of activities and shall keep their respective Ministries/Agencies, duly informed of progress and achievements.

Major Impact including Employment Generation Potential:

The Memorandum of Understanding shall facilitate exchange of experiences, best practices and technical knowhow through both public and private sectors and shall contribute to sustainable development. The Memorandum of Understanding provides the possibility for joint projects in areas of mutual interest. However, no significant employment generation is envisaged.

Expenditure:

The financial implications of the proposed Memorandum of Understanding are limited to holding of the bilateral meetings / Joint Working Group meetings which shall meet alternatively in India and Bhutan. The sending side shall bear the travel cost of their delegation while the receiving side is to meet the cost of organizing the meetings and other logistic arrangements. These are the limited financial implications of the proposed Memorandum of Understanding.

Background:

A Memorandum of Understanding (MoU) was signed between the Central Pollution Control Board (CPCB), Ministry of Environment, Forest and Climate Change (MoEFCC) of the Government of the Republic of India and the National Environment Commission (NEC) of the Royal Government of Bhutan on 11th March, 2013. This MoU expired on 10th March, 2016. Noting the benefits of the earlier MoU, both sides have decided to continue cooperation and collaboration in the field of Environment.

Conservation News -

Government issues advisory to streamline the process for import & possession of exotic live species

Exotic live species are animal or plant species moved from their original range (location) to a new one. These species are introduced to a new location most often by people. Many citizens of the country have kept CITES (Convention of International Trade in Endangered Species)

enlisted exotic animal species in their possession but there is no unified information system available of such stock of species at the State/Central level. Ministry of Environment, Forest and Climate Change has decided to collect stock information from the holders of such species through voluntary disclosure in next six months.

The registration will be done for the stock of animals, new progeny, as well as for import and exchange. This will help in better management of the species and guide the holders about proper veterinary care, housing and other aspects of well-being of the species. The database of exotic animals will also help in control and management of zoonotic diseases on which guidance would be available from time to time to ensure safety of animals and humans.

The declarer would not be required to produce any documentation in relation to the exotic live species if the same has been declared within six months of the date of issue of the advisory. For any declaration made after 6 months, the declarer shall be required to comply with the documentation requirement under the extant laws and regulations.

Holders of such species have to visit the website (www.parivesh.nic.in) and fill up the requisite forms in order to complete the stock registration process.

Urban Forest scheme to develop 200 'Nagar Van' across India in next 5 years

On the occasion of World Environment Day, the Government of India announced implementation of the Nagar van scheme to develop 200 Urban Forests across the country in next five years with a renewed focus on people's participation and collaboration between Forest Department, Municipal bodies, NGOs, Corporates and local citizens. World Environment Day (WED) is celebrated on 5th June every year. Ministry of Environment, Forest & Climate Change celebrates WED focusing on the theme declared by United Nations Environment Programme (UNEP) and organizes several events. This year's theme is 'Biodiversity'. In view of the prevalent situation due to COVID-19 pandemic the ministry held virtual celebrations of World Environment Day on this year's theme with focus on *Nagar Van* (Urban Forests).

Releasing a brochure on the best practices on Urban Forests and announcing the Nagar Van scheme, Union Environment Minister, Shri Prakash Javadekar said that these forests will work as lungs of the cities and will primarily be on the forest land in the City or any other vacant land offered by local urban local bodies.

It would be pertinent to mention that MoEF&CC under Shri Javadekar is actively diverting India's forests for dams, mines, industries and other projects. During the lockdown period, MoEF&CC was overactive in changing the EIA (Environment

Conservation News -

Impact Assessment) norms for pharmaceutical companies and exempted them from conducting EIA. The reason given was that for Covid-19 it is important to have more drugs manufacturing. Similarly in April, MoEF&CC gave permission to a host of forest diversions. Despite this, Shri Javadekar with a straight face said the theme for this years Environment day is “Time for Nature” with special focus on biodiversity. He said “thumb rule is that if we protect nature, nature protects us”

Stressing on this year’s focus on Biodiversity the Environment Minister said, “India has 8 percent of world's biodiversity, despite having many constraint like only 2.5 % of the world's landmass, has to carry 16% of human as well as cattle population and having only 4% of fresh water sources; the mega biodiversity that we have is the result of Indian ethos which is to be in sync with the nature.” Wish the Environment Minister walks the talk and respects India’s ethos and stops rampant diversion of India’s forests for industrial projects, mines, dams etc.

Equipment Discussions -

Olympus to exit Camera business:

Legendary Camera maker Olympus has announced that it is exiting the camera business following losses in three consecutive financial years. Olympus has signed a definitive agreement with Japan Industrial Partners(JIP) to hive off the imaging business of Olympus into a new company and transfer the shares to JIP.

Olympus journey began with when it launched a photographic camera with Zuiko lens in 1936. Recently it was selling the Olympus OM-D digital interchangeable lens mirrorless camera. It had many innovative cameras including half-sized camera Zuiko Pearlcolor in 1969.



In the recent times its OM-D series cameras were popular.

When Nokia added a camera to its phones, the photographic industry was too slow to understand its implications. Today, the smartphones sales have sky rocketed and the phone manufacturers have enormous amounts of money to conduct R&D to improve the camera function. The small sensor size in the mobile phones have inferior light gathering capacity than the compact cameras and DSLRs. So the mobile manufacturers focused on improving the software which can process the signal from the small mobile camera sensors and create better images. The high volumes of the smart phone sales have given the mobile manufacturers lot of money to invest in R&D to improve the mobile phone camera and software processing functions. Also, the ability to immediately click and directly upload the photos to the social media profiles helped in the impulsive nature of social media users. So compact camera sales virtually vanished in a few years. The high end smartphones have now improved in terms of camera function and hence many DSLR users are also using the phone as it is handy. So camera manufacturers are now in the backfoot. Olympus was the first to sell off in the recent times because Olympus failed to see the trends. People wanted videos in their cameras and Olympus tried to remain as a tool for still photographers.

The future also looks bleak as now phone manufacturers are working on multiple cameras with multiple lenses to simultaneously shoot different perspectives. So smaller camera manufacturers are increasingly under pressure. Even niche high-

Equipment Discussions -

end camera manufacturer Hasselblad a couple of years ago was sold of to chinese drone maker DJI.

Sony corporation had tried its hand in mobile phones when camera was not a much of a feature in mobile phones. Recently high-end cinema camera manufacturer RED tried to launch a smartphone that was supposed to act as an extension of high end cameras. However, the project titled Hydrogen had very poor execution and had to be shelved after the initial iteration.

Now Smartphone makers have more money to buy out camera manufacturers, if they want. However, most of the smaller camera manufacturers are more likely to be bought and asset stripped. This news of Olympus selling its camera business is a sign of things to come in future. Following is the complete press release by Olympus.



News Release

Company: Olympus Corporation Yasuo Takeuchi, Director, Representative Executive Officer, President and CEO (Code: 7733, First Section, Tokyo Stock Exchange)

Company: Japan Industrial Partners, Inc. Hidemi Moue, CEO

Signing of Memorandum of Understanding for Divestiture of Imaging Business

Equipment Discussions -

Olympus Corporation ("Olympus") and Japan Industrial Partners, Inc. ("JIP") hereby announce that, today, the parties signed a memorandum of understanding to carveout Olympus's Imaging business to a new company ("NewCo") and subsequently transfer its shares to a fund managed, operated or otherwise handled by JIP (the "Transaction").

After the due diligence and further discussions and negotiations, the parties are aiming to sign a legally- binding definitive agreement for the Transaction (the "Definitive Agreement") by September 30, 2020. We will promptly make further announcement if any matters relating to the Transaction that needs further announcement occur.

1. Background and Purpose of the TransactionOlympus's Imaging business began with the manufacture and sale of a camera using the photographic lens Zuiko in 1936. Through innovative technology and unique product development capabilities, Olympus has developed and launched various products, aiming to contribute to make people's lives more fulfilling. Those products include: Olympus Pen, the innovative half-sized camera; Zuiko Pearlcorde, the world's first micro-cassette tape recorder; and Olympus OM-D series, the mirrorless interchangeable lens camera.

Olympus has implemented measures to cope with the extremely severe digital camera market, due to, amongst others, rapid market shrink caused by the evolution of smartphones; Olympus has improved the cost structure by restructuring the manufacturing bases and focusing on high-value-added interchangeable lenses, aiming to rectify the earning structure to those that may continue generating profit even as sales dwindles. Despite all such efforts, Olympus's Imaging business recorded operating losses for 3 consecutive fiscal years up to the term ended in March 2020.

Under such circumstances, Olympus considers that, by carving-out the Imaging business and by operating the business with JIP, the Imaging business's corporate structure may become more compact, efficient and agile and it is the most appropriate way to realize its self-sustainable and continuous growth and to bring values to the users of our products as well as our employees working in the Imaging business. Olympus therefore has decided to sign the memorandum of understanding for the Transaction.

JIP has strong track records in supporting strategic carve-outs that realize growth potential and encourage autonomous growth. By adding support from JIP, the NewCo, as the successor of reputable brands such as "OM-D" and "ZUIKO," will utilize the innovative technology and unique product development capabilities which have been developed within Olympus, and will realize continuous growth of the business by bringing better products and services to the users and customers and by making itself a productive and rewarding work place for its employees.

2. Imaging Business after the TransactionNewCo will succeed and maintain the research and development functions and manufacturing functions globally as reformed under the contemplated structuring reforms to continue to offer high-quality, highly reliable products; and also continue to provide supports to the imaging solution products that have been distributed by Olympus.

3. Outline of the TransactionThe specifics of the Transaction shall be decided in the Definitive Agreement after careful examination and consultation between the parties. The parties currently consider the outline of the Transaction shall be as

Equipment Discussions -

follows.

The parties will proceed with the actions and procedures for Transactions in full compliance with applicable laws including consultation obligations and other requirements under local employment laws.

- **Structure :**

(i) Olympus's Imaging business will be transferred to the NewCo by way of company split or otherwise, and then, (ii) shares in the NewCo will be transferred to a new company to be established by JIP.

- **Signing of Definitive Agreement** : Scheduled to be signed by September 30, 2020
- **Closing** : Olympus and JIP strive to close the Transaction by December 31, 2020.

4. **Structuring Reform** Prior to the closing of the Transaction, Olympus plans to implement structuring reforms to the Imaging business aiming to change the business structure of Imaging business to be more profitable and sustainable. We are currently investigating costs and other impacts of the structuring reform. If any future event which requires disclosure arises, Olympus will announce it promptly.

Equipment Discussions -

Venus Optics unveils three new Ultra wide cine lenses :

Venus Optics who manufacture some specialized and interesting macro lenses have announced that they have launched cine versions of 3 ultra wide lenses.

The Laowa 7.5mm T2.1 Cine is available in Micro Four Thirds mount and will fit Blackmagic Pocket 4K, Panasonic GH5 and Z-Cam E2 cameras.



The 9mm T2.9 Zero-D Cine is available in Fuji X, Sony E mount and Micro 4/3 mount. The Micro Four Thirds mount can cover the same cameras as 7.5mm and serve as an not-as-wide alternative to MFT users. The Fuji X mount is extremely popular among XT-4 or XH-1 shooters. The Sony E mount works really well with Sony cameras with Super35 sensors including FS5, FS7, A6500 series, etc.

Currently the 15mm T2.1 Zero-D Cine is designed for large format sensor with Sony FE mount and is best suited with Sony full frame cameras like Sony A7 series and FX9.

New Nikon Z, Canon RF and Leica L mount will be introduced later this year as well as will work with RED Komodo, Canon R5, Nikon Z6/Z7, Sigma FP, Panasonic S1H etc.

According to Venus Optics all these three lenses have the same optical constructions as the photography versions of the lenses and the Cine versions have better construction standards. It will help as all the three lenses are fast T2.1 and hence will allow higher amount of light.

Both the aperture and focus rings have been built with industry standard 0.8 mod pitch gears for pairing up with follow-

Equipment Discussions -

focus motors. The aperture ring is now click-less for smooth iris control. Every one of Laowa cine lenses comes with a filter thread for filmmakers to use screw-in filters and mini matte-boxes. Entire lens body is made by premium grade aluminum and build for usage in extreme environment. And interestingly Venus Optics will include a pelican case for the lens so that the lens is protected during travel.

Ultra-wide FoV & fast aperture

All three Laowa cine lenses feature an ultra-wide angle of view and fast aperture. The Laowa 7.5mm T2.1 feature a 110° FoV on MFT while the 9mm T2.9 features a 113° on Super35 sensors. The 15mm T2.1 instead features a 110° FoV on cameras with full frame sensors. The fast maximum t-stop is well suited for filming under low light condition. It also allows filmmakers to have more flexibility in depth of field control.

Close-to-zero distortion

Both the 9mm and 15mm feature the distinguishing Laowa close-to-zero distortion (Zero-D) design where the optical distortion at infinity distance has been compressed to the minimal. This is extremely important for motion picture recording when shooting indoor, architecture or footage with straight lines included. This also saves tremendous amount of time in distortion correction in post processing.

Compact & lightweight

All three wide angle prime lenses are extremely compact and lightweight. Both 7.5mm and 9mm weigh close to 0.5 lbs (226g). The 15mm is a little bit heavier due to the larger coverage but Venus Optics still manage to compress it to around 1.2 lbs (540g). On the contrary to the huge and heavy wide angle lenses in the market, the new Laowa cine lenses are extremely handy for run-and-gun productions, shooting with gimbals, in-car shots, indoor scene, etc.

Close Focusing Distance

All three Laowa cine lenses possess an extremely close focusing distance. This provides a great deal of flexibility for directors to compose shots at any distance. Filmmakers can also take advantage of this close focusing to create some wide angle shots with shallower depth of field. Both the Laowa 7.5mm and 9mm can focus as close as 4.7" (12cm) from sensor to subject while the 15mm can focus up to 5.9" (15cm).

Laowa Wide Angle Cine Lenses line-up

Together with the Laowa 12mm T2.9 Zero-D Cine released earlier for EF and PL cinema cameras, Venus Optics currently offer four wide angle cine lenses for cinema cameras with different sensor sizes.

Pricing & Availability

At the moment all three cine lenses are currently available to purchase via Venus Optics official website and authorized resellers. The US price for 7.5mm T2.1 and 9mm T2.9 is \$599/pc (ex-VAT) and 15mm T2.1 is \$1,199/pc (ex-VAT). Pricing varies in different countries.

Equipment Discussions -

Panasonic G100 Vlogging camera

Panasonic has launched a vlogging camera Lumix G100 with sound from OZO audio of Nokia.

It is marketed as a stepup from a smartphone with its larger 4/3 sensor size. It has a 20.3 Megapixel sensor. Maximum still shot resolution is 5184 x 3888 and can shoot in jpeg and raw.

The G100 camera doesn't have a low pass filter in front of the sensor and together with the Venus engine it can create sharp photos and videos.



The minimum ISO is ISO 200 and maximum ISO sensitivity is ISO 25600.

The Panasonic G100 comes with a 12-32mm f3.5-5.6 ASPH lens. This lens because of being mated to a micro 4/3 sensor acts like a 24-64mm (35 mm equivalent) lens. It has a retractable design, so is compact. There are three aspherical elements and one extra-low dispersion element to control chromatic aberration and spherical aberration. There is a built-in autofocus motor. It is to be seen how good the AF in real world applications.

4K videos in 3840 x 2160 resolution at 30p or 24p in MP4 and Full-HD at 60p recorded internally with 8-bit color depth

Equipment Discussions -

and 4:2:0 sampling. Full HD external recording is supported via micro-HDMI with 4:2:2 sampling and 8-bit color depth. The lack of 4:2:2 internal sampling and lack of 10 bit colour is not expected to be a major problem as this camera is primarily aimed at the amateurs. It is in NTSC and not PAL. So 25p is not featured in this camera yet. Hopefully they will include in a later firmware.

Panasonic has also included V-log L mode so that people can have a flat log profile. The five axis hybrid image stabilisation will come in handy for handheld video shooting, even while walking or slow moves.

The G100 camera has a rear 3.0" 1.84m-dot LCD. It has touchscreen facilities and it has a free-angle design ie. the LCD can be turned around and that benefits working from high, low, and front-facing to record selfies/ vlogging.

The OZO audio of Nokia has subject tracking facility which works on the angle of view of the lens and face recognition. It has three microphones and will pickup based on the optimum direction of the sound source. The three microphones can also be set manually.

To professional videographers it may appear sickening, however, millions of smartphone users due to ignorance hold the camera vertical and click vertical videos. To pander to the trend Panasonic has included a vertical video mode in the G100 camera.

There is an optional tripod grip available. The good thing about this optional tripod grip DMW-SHGR1 is that it can be connected to the camera via usb and you can start/stop video recording, use it as shutter release as well as put to sleep/wake up the camera. One can use it for timelapse as well.

The built-in WiFi and Bluetooth helps in connecting with a smartphone. One can remotely operate the camera with the smartphone as well.

The Panasonic G100 has been designed to be compact and the camera body weighs 352 g and the 12-32 lens weighs 70g.

Price without grip: \$747.99 US Dollars

Price with grip: \$797.99 US Dollars

Awaiting India Price. Below is the B&H link with these prices:

<https://www.bhphotovideo.com/c/buy/P...DFF/d10-v1-t12>

PRESS RELEASE

Panasonic Launches the LUMIX G100, its Newest Mirrorless Camera for Vlogging and Creative Video Content

The compact, feature-packed camera features high sound quality produced by OZO Audio by Nokia

NEWARK, N.J., June 24, 2020 /PRNewswire/ -- Panasonic today launched the LUMIX G100, a new Digital Single Lens Mirrorless camera designed and developed for creating high-quality, versatile content.

Equipment Discussions -

Intuitive controls, visually engaging images and excellent sound quality are hallmarks of the new LUMIX G100, raising the bar for content production and user experience in the vlog camera category. Usability is further enhanced by its remarkably compact and lightweight design that doesn't skimp on functionality and creative options.

1. The Logical Next Step from your Smartphone

With their limited sensor size and optics, a Smartphone can only take your creativity so far, the LUMIX G100 uses a smartphone crushing 4/3rds sensor that records smooth, high-resolution QFHD 4K videos in 3840 x 2160 resolution at 30p or 24p in MP4*¹ and Full-HD at 60p. The five-axis hybrid I.S. (image stabilizer)*² in the LUMIX G100 provides effective shake suppression essential for capturing stable, easy-to-see video in scenarios such as walking or in a moving vehicle. In addition, the new Video Selfie Mode easily captures both the videographer and background in crisp focus without adjustments of aperture that changes with the lens each time.

Adopting a static-type touch control system, the 3.0-inch free-angle rear monitor with 1,840K-dot high resolution makes it easy to compose selfies as well as shots from a high or low angle. Convenient shooting assist functions allow the Frame Maker to check the composition during recording in various popular aspect ratios such as 16:9, 4:3, 1:1, 4:5, 5:4 and 9:16. The REC Frame Indicator displays an eye-catching red frame so that videographers can recognize whether the camera is recording or not at a glance.

*¹ Recording stops when the continuous recording time exceeds 10 minutes with [MP4] in [4K]

*² When using an interchangeable lens (H-FS12032) released before this camera, update the firmware of the lens to the latest version.

2. High Sound Quality Supported by OZO Audio Technologies

The LUMIX G100 integrates OZO Audio by Nokia for high-quality spatial audio recording, a first for a Digital Single Lens Mirrorless camera.* Engineered for universal playback and shareability across the world's most popular social media platforms, the OZO Audio enables users to capture and edit the full richness of sonic life with vibrant accuracy and precision. It sets a new standard in innovative audio solutions for user-generated content. Three microphones record clear, vibrant sound with outstanding images, for example a dynamic landscape with immersive, realistic sound; interviews with clear speech; or easy, on-the-scene coverage by the videographer with easy mode selection. Combining Panasonic and Nokia OZO Audio technologies, the LUMIX G100 also offers a tracking feature that continues tracking the voice of the subject. Auto mode automatically recognizes the best setting and switches between tracking and surround modes.

For a digital interchangeable lens system camera, as of June 24, 2020.

3. High Potential and Unlimited Expression

The new LUMIX G100 integrates a 20.3MP MOS Sensor without Low Pass Filter, which features higher resolution and a larger size than found in smartphones. Realizing maximum ISO 25600 high sensitivity, even images captured at night or low light are clear. In addition, the large sensor enables beautiful defocusing in the background, and the Venus Engine assures high-speed, high-performance image processing. Impressive 4x*/2x slow and 8x/4x/2x quick FHD motion footage

Equipment Discussions -

and time lapse shots are captured with ease.

Advanced videographers will appreciate the V-LogL recording capability; users can apply the LUT (Look Up Table) of their choice on the recorded V-LogL footage via a PC to create a differentiated video with subtle colors and moods.

Features such as the 4K technology, along with the 3,680K-dot equivalent center-aligned viewfinder, allow users to capture 4K PHOTO shots, excelling in performance and function for photo shooting. Able to save spontaneous shots by just selecting the frame out of a burst file sequence, users will never miss a moment.

*30p only

4. Easy Connectivity via Bluetooth, Wi-Fi and HDMI

The LUMIX G100 integrates Bluetooth and Wi-Fi® 2.4GHz (IEEE802.11b/g/n) connectivity to offer a more flexible shooting experience and easy instant image sharing. A dedicated upload button controls video and photo transfer to a smartphone via Panasonic's LUMIX Sync app for iOS / Android. Users can also use their smartphone as a remote control to capture video and photo.

Compatibility with Bluetooth 4.2 (called BLE: Bluetooth Low Energy) enables constant connection with a smartphone/tablet with minimum power consumption and can activate the camera by using a smartphone/tablet or automatically add geotagging photos.

HDMI*¹ allows video output via The LUMIX G100, or it can be used as a webcam that provides exceptional image quality with rich depth of field and high quality sound for streaming in combination with an HDMI video capture device.*²

*¹ It is not possible to stream live in 4K. While using the HDMI output function, video cannot be recorded.

*² A separate streaming software for PC is required.

5. Compact, Lightweight Design Even with Tripod Grip

Despite its high performance and selection creative functions, the LUMIX G100 is portable, compact and weighs only 412 g, even with the LUMIX G VARIO 12-32mm / F3.5-5.6 ASPH. / MEGA O.I.S.(H-FS12032) lens. A new Tripod Grip DMW-SHGR1*⁴ makes it even easier to hold the camera or can be used as a compact tripod. Connecting with the camera via USB allows the user to start/stop video recording, release the shutter and enable/disable sleep mode. The camera's battery can be recharged either via AC or USB according to the user's convenience.

*⁴ Tripod Grip is bundled in DC-G100V kit. It is also sold separately.

The LUMIX G100 will be available for sale at the end of July.

Natural History -

COUNTRY NOTEBOOK: Friendly Hobgoblins: M.Krishnan:- 04-02-1951

The Sunday Statesman (shared by Shri. Saktipada Panigrahi)

Friendly Hobgoblins

"OTHER birds fly away. Or else they go about their business, unmindful of you, or sit passively, not knowing you are there. But the Spotted Owlet resents your prying into its affairs and takes pains to let you know that it does. It glares malevolently at you from round, unwinking eyes and bobs its round head up and down, the baleful yellow eyes still upon you and a torrent of gurgling, voluble swearing pours out at you from its squat, softly-barred form.



Vipin Sharma

Spotted Owl

Photo Courtesy - Vipin Sharma

All the owls are apt to resent close scrutiny but none so expressively as this owlet, though it is never dangerous as some of the larger members of the tribe can be. The Spotted Owlet's intimidatory display has been called clowning, because it is so small we can afford to feel amused at its impotent anger and bowing, bobbing clock-face. Imagine the bird magnified to the size of its larger cousins and the demonstration would seem funny no longer, it would serve to scare people then all right.

.....Where there are aged trees, with knots and holes in their trunks, the owlet prefers a nice dark hole in the wood, sufficiently deep for daytime retreat and siestas. Not that it has the traditional owl's intolerance of light. Spotted Owlets come

out at noon sometimes to hunt prey and it has been rightly said that they are crepuscular because they fear not the sun but the mobbing to which other diurnal birds subject them when they show up in daylight.

.....Owlets clutch at their prey with their comprehensive talons and catch them that way. Insects form their staple food, hawked in the air or pounced down upon from a look out post, but they take minor lizards also, and even little birds and mice. I do not know why such a useful bird should be so widely abhorred but the curse of owl tribe is upon it and even to-day there are quite a number of people encompassing its destruction when it is incautious enough to take up residence near their homes.

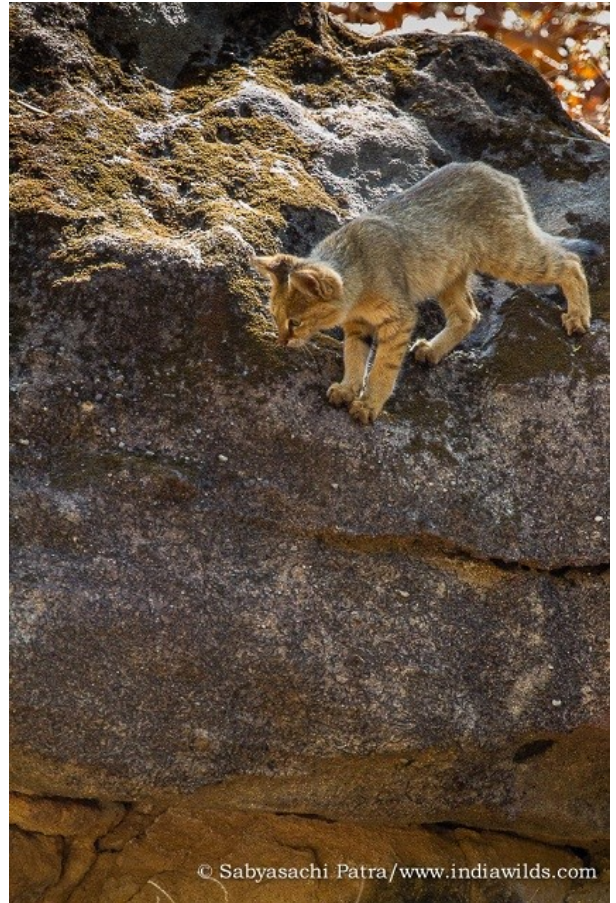
.....I am afraid we do not know our friends. I find the quaint, semi-cubist looks of the Spotted Owlet charming and its noiseless flight and bold behavior interest me. Other may not have my tastes (may be mine are depraved) but surely a bird so useful about the house and garden and such an efficient check on obnoxious insects deserves to be encouraged and shooting it on sight is no way to encourage any bird."

- M. Krishnan

This was published on 04-02-1951

Wildlife Photography -

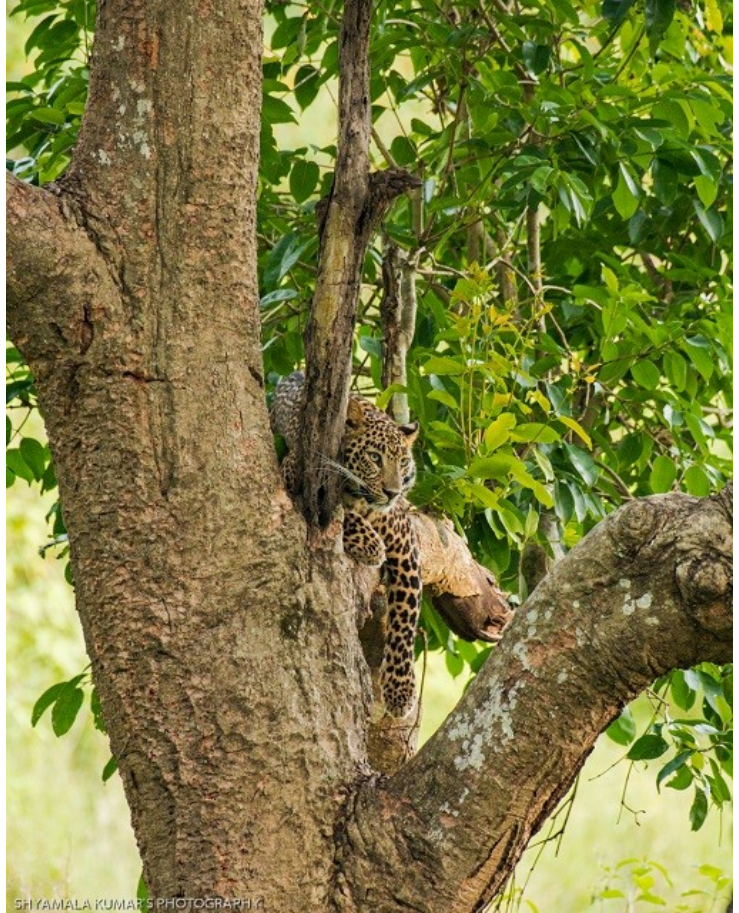
Jungle Cat in Bandhavgarh by Sabyasachi Patra



Golden Jackal by Sucheth Lingachar



Wildlife Photography - **Leopard by Shyamala Kumar**



Tigress in Tadoba by V S Sankar



Wildlife Photography -

Rhino in Manas by Samrat Sarkar



Black headed Ibis with Snake by Mrudul Godbole



Wildlife Photography -

Changeable Hawk Eagle dark morph by Sabyasachi Patra



Spider by Prajwal Ullal





This is the **138th issue** of IndiaWilds. A waterfall image adorns the cover page. In the land of the tiger why a waterfall image for cover page would be the question by many. This is an era of Climate Change. The world is gripped by a climate crisis. Our weather patterns have changed. Monsoons have been delayed this year. The intensity and span of the rains in the monsoon season has changed. So some places face unprecedented rainfalls and some other places face drought. Our himalayan glaciers are melting and receding. Since the media doesn't travel to the far-off borders of India, the common man and women are not aware that with the receding glaciers our rainfed rivers are going to be majorly impacted. History has taught us that many a civilisations have perished due to lack of water.

India's human population is rapidly expanding and has reached 1.4 billion. We are poised to soon overtake China and become the most populous country in the world. Such a massive population needs water. To make matters worse, development and job opportunities are concentrated in the big cities. So people tend to migrate and concentrate in the big cities. That creates even more demands on water. Sand mining of our rivers to provide sand for construction is killing our rivers. Without sand in the rivers water cannot percolate and hence our rivers are dying. Cutting off trees in the hills, forests and river banks is also impacting the rivers as many smaller streams are dying. As a country if we are not cautious about the impact of Climate Change on our lives, then future is going to be bleak. It is important that we raise awareness among people and convince the Government to protect nature so that we can escape from the vagaries of climate change.

I look forward to your inputs and support in preserving the last tracts of wilderness and wildlife of our beautiful country. For other interesting articles and images check - <http://www.indiawilds.com/forums/>

To post in the IndiaWilds forums, you can register free of cost using your Full Name as user id at -

<http://www.indiawilds.com/forums/register.php>

If you are already a member of IndiaWilds and have forgotten your user id and/or password you can mail administrator@indiawilds.com

Regards,

Sabyasachi Patra

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